

NATURAL RESOURCES CONSERVATION SERVICE

VIRGINIA

OPERATION AND MAINTENANCE REQUIREMENTS

IRRIGATION REGULATING RESERVOIR

CODE 552

Land Owner/Operator_____

County_____ SWCD_____ Farm/Tract No. _____

Prepared By_____ Date_____

OPERATION AND MAINTENANCE ITEMS

A properly operated and maintained irrigation regulating reservoir can be an asset to the farm. The reservoir was designed and installed to regulate or store a supply of water for irrigation for a relatively short time. Estimated life span of this installation is at least _____ years. The life of the reservoir can be assured and usually increased by developing and carrying out a systematic operation and maintenance program.

This practice will require periodic maintenance and may also require operational items to maintain satisfactory performance. Your operation and maintenance program includes:

- The reservoir should be inspected periodically and especially after heavy rains to determine whether it is functioning properly or if repairs are needed.
- Periodically inspect the spillways and control gates for their ability to maintain the water level to design elevations. Immediately remove any blockage or obstructions in spillways. The water level established by the outlet structure shall not be manipulated to raise the water level above the planned elevation.
- Conduct periodic cleaning and re-grading of collection facilities to maintain proper flow lines and functionality. Remove sediment from traps and/or storage facilities to maintain design capacity and efficiency.
- Inspect or test all pipelines and pumping plant components and appurtenances, as applicable. Conduct routine maintenance of all mechanical components in accordance with manufacturer recommendations.
- Perform water quality analysis as necessary to evaluate nutrients, pesticides, and pathogens.
- Appurtenances such as trash racks, outlet structures and gates shall be kept free of trash and replaced as necessary. Remove debris that may accumulate at the embankment and immediately upstream or downstream from the reservoir. Screens and/or rodent guards shall be kept in place. If fences are installed, they shall be maintained to prevent unauthorized livestock entry.

- Erosion on the slopes of the dam and in spillways shall be filled with suitable material, compacted, seeded and fertilized as needed. If seepage through or under the dam occurs, proper corrective measures shall be taken immediately.
- Maintain vigorous growth of vegetative coverings. This includes reseeding, fertilization, and application of herbicides when necessary. Fertilize as needed to maintain a uniform vigorous stand. Periodic mowing may also be needed to control height. Trees can cause leaks and safety hazards and should not be permitted on the embankment or in the auxiliary spillway.
- Immediately repair any vandalism, vehicular, or livestock damage to any earthfills, spillways, outlets or other appurtenances.
- Eradicate or otherwise remove all rodents or burrowing animals and repair any damage caused by their activity.

Additional Operation and Maintenance Requirements Specific to this Plan:

[illegible]